

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S91	42	S90 and @pd<="20040402"	US-PGPUB; USPAT	OR	ON	2007/11/16 17:06
S90	68	S86 same ((ratio percent\$4 proportion scale fraction) near4 (axial circumferen\$4 radi\$3 diameter axis))	US-PGPUB; USPAT	OR	ON	2007/11/16 17:06
S89	18	S88 and @pd<="20040402"	US-PGPUB; USPAT	OR	ON	2007/11/16 17:06
S88	28	S86 same ((ratio percent\$4 proportion scale fraction) with (length width depth height) near2 (axial circumferen\$4 radi\$3 diameter axis))	US-PGPUB; USPAT	OR	ON	2007/11/16 17:05
S87	724	S86 same (ratio percent\$4 proportion scale fraction)	US-PGPUB; USPAT	OR	ON	2007/11/16 17:02
S86	19806	((tolerance\$ or leeway or allowance\$2 or spacer) near1 (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2))	US-PGPUB; USPAT	OR	ON	2007/11/16 16:59
S9	3100	(tolerance\$ or leeway or allowance\$2) adj (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/16 16:58
S85	458	403/365.ccls.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2007/11/16 16:00
S84	380	384/535	US-PGPUB; USPAT; EPO; JPO	OR	ON	2007/11/16 15:59
S1	22	((("4,790,683") or ("4,828,423") or ("4,981,390") or ("5,125,755") or ("6,288,878") or ("6,288,879") or ("6,333,839") or ("6,411,472") or ("6,480,363") or ("6,525,910") or ("6,527,449")).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/11/16 15:57
S83	109	(384/581).ccls.	US-PGPUB; USPAT	OR	ON	2007/11/13 11:17
S65	664	(403/202,367,372).ccls.	US-PGPUB; USPAT	OR	ON	2007/11/13 11:16

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S82	281	267/161.ccls.	US-PGPUB; USPAT	OR	ON	2007/11/09 16:22
S81	12	(toleranc\$3 near2 (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)) same ((hardness\$4 or hard\$4 or stiffness\$4 or rigidity\$2 or rigid\$3 or firmness\$2 or softness\$3 or yield\$2 or brunell\$2) near3 radi\$5)	US-PGPUB; USPAT	OR	ON	2007/11/07 17:45
S79	6	(toleranc\$3 near2 (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)) with ((hardness\$4 or hard\$4 or stiffness\$4 or rigidity\$2 or rigid\$3 or firmness\$2 or softness\$3 or yield\$2 or brunell\$2) near2 (radi\$5))	US-PGPUB; USPAT	OR	ON	2007/11/07 17:44
S80	1	(toleranc\$3 near2 (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)) with ((hardness\$4 or hard\$4 or stiffness\$4 or rigidity\$2 or rigid\$3 or firmness\$2 or softness\$3 or yield\$2 or brunell\$2) near2 (radi\$5))	FPRS; EPO; JPO	OR	ON	2007/11/07 17:38
S76	26	(ratio near2 (length near4 width)) and (toleranc\$3 near2 (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 17:31
S78	0	("2006/0181811").URPN.	USPAT	OR	ON	2007/11/07 17:30
S77	0	("2006/0275076").URPN.	USPAT	OR	ON	2007/11/07 17:30
S75	1	((length width depth height) near6 (axial circumferen\$4 radi\$3 diameter axis)) with (ratio)) and S65	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 17:23

## EAST Search History

S74	0	((length width depth height) near6 (axial circumferen\$4 radi\$3 diameter axis)) with (ratio)) and S70	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 17:14
S71	0	((length width depth height) near2 (axial circumferen\$4 radi\$3 diameter axis)) same (ratio percent\$4 proportion scale fraction)) and S70	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 17:09
S70	302	(411/520,521).ccls.	US-PGPUB; USPAT	OR	ON	2007/11/07 16:51
S73	0	((tolerance\$ or leeway or allowance\$2) near2 (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)) and S70	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 16:50
S72	0	((tolerance\$ or leeway or allowance\$2) adj (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)) and S70	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 16:50
S69	4	((length width depth height) near2 (axial circumferen\$4 radi\$3 diameter axis)) same (ratio percent\$4 proportion scale fraction)) and S65	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 16:46
S66	10	((tolerance\$ or leeway or allowance\$2) adj (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)) and S65	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 16:46

## EAST Search History

S67	1	((length width depth height) near2 (axial circumferen\$4 radi\$3 diameter axis)) same ((adjust\$3 manipul\$3 chang\$3 increas\$3 decreas\$3 improv\$3 calculat\$4) near2 (ratio percent\$4 proportion scale fraction))) and S65	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 16:35
S68	11	((tolerance\$1) near2 (ring\$2 or annulus\$2 or annulet\$2 or circle\$2 or hoop\$2 or band\$2 or doughnut\$2 or grommet\$2 or halo\$2 or rung\$2 or collar\$2 or annular\$2 or loop\$2 or gasket\$2 or rim\$2 or shank\$2)) and S65	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 16:31
S49	443	((length width depth height) near2 (axial circumferen\$4 radi\$3 diameter axis)) same ((adjust\$3 manipul\$3 chang\$3 increas\$3 decreas\$3 improv\$3 calculat\$4) near2 (ratio percent\$4 proportion scale fraction))) and ((toleranc\$3 clearanc\$3 annular shaft) near2 (ring sleeve collar))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 16:18
S64	3	(thick\$4) and S58	US-PGPUB; USPAT	OR	ON	2007/11/01 17:13
S63	1	((radi\$3 or diameter) same (thick\$4)) and S58	US-PGPUB; USPAT	OR	ON	2007/11/01 17:12
S62	2	((radi\$3 or diameter) same (curv\$3 or profile or line or shape) and (thick\$4)) and S58	US-PGPUB; USPAT	OR	ON	2007/11/01 17:12
S61	0	((radi\$3 or diameter) near6 (curv\$3 or profile or line or shape)) and S58	US-PGPUB; USPAT	OR	ON	2007/11/01 17:11
S60	1	((radi\$3 or diameter) with (curv\$3 or profile or line or shape)) and S58	US-PGPUB; USPAT	OR	ON	2007/11/01 17:11
S59	0	((radi\$3 or diameter) near2 (curv\$3 or profile or line or shape)) and S58	US-PGPUB; USPAT	OR	ON	2007/11/01 17:11
S58	7	(US-6411472-\$ or US-6163441-\$ or US-6062736-\$ or US-4286894-\$ or US-3838928-\$ or US-3424287-\$ or US-3197243-\$).did.	US-PGPUB; USPAT	OR	ON	2007/11/01 17:09
S57	181	S49 and @pd<="20040402"	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/01 15:17
S51	153	S50 and @pd<="20040402"	US-PGPUB; USPAT	OR	ON	2007/11/01 15:16

## EAST Search History

S56	12	S54 not S55	US-PGPUB; USPAT; FPRS; EPO; JPO	OR	ON	2007/11/01 15:08
S54	75	((length width depth height) near5 (axial circumferen\$4 radi\$3 diameter axis)) same ((adjust\$3 manipul\$3 chang\$3 increas\$3 decreas\$3 improv\$3 calculat\$4) near10 (ratio percent\$4 proportion scale fraction))) same ((toleranc\$3 clearanc\$3 annular shaft) near5 (ring sleeve collar))	US-PGPUB; USPAT; FPRS; EPO; JPO	OR	ON	2007/11/01 15:08
S55	63	S54 and @pd<="20040402"	US-PGPUB; USPAT	OR	ON	2007/11/01 14:54
S53	4	((("6163441") or ("3700271") or ("3061386") or ("2931412"))).PN.	US-PGPUB; USPAT	OR	OFF	2007/11/01 14:52
S48	16	((length width depth height) near2 (axial circumferen\$4 radi\$3 diameter axis)) with ((adjust\$3 manipul\$3 chang\$3 increas\$3 decreas\$3 improv\$3 calculat\$4) near2 (ratio percent\$4 proportion scale fraction))) same ((toleranc\$3 clearanc\$3 annular shaft) near2 (ring sleeve collar))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/01 14:49
S52	2	"6163441".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/01 14:32
S50	262	((length width depth height) near2 (axial circumferen\$4 radi\$3 diameter axis)) same ((adjust\$3 manipul\$3 chang\$3 increas\$3 decreas\$3 improv\$3 calculat\$4) near2 (ratio percent\$4 proportion scale fraction))) and ((toleranc\$3 clearanc\$3 annular shaft) near2 (ring sleeve collar))	US-PGPUB; USPAT	OR	ON	2007/11/01 14:19
S47	1	"3776653".pn.	US-PGPUB; USPAT	OR	ON	2007/11/01 14:01
S46	1	"6754046".pn.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2007/11/01 13:56

## EAST Search History

S28	0	((length width depth height) near2 (axial circumferen\$4 radi\$3 diamater axis)) near2 (ratio percent\$4 proportion scale fraction)) and S27	US-PGPUB; USPAT; EPO; JPO	OR	ON	2007/11/01 13:53
S45	119	360/265.6	US-PGPUB; USPAT; EPO; JPO	OR	ON	2007/11/01 13:01